

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark Henry on April 06, 2010.

In the Amendments to the Claims of 3/23/2010:

In Claim 10, line 2, the terms "non-reducing sugar residue" have been replaced by the terms "fructosyl group".

In claim 24, line 2, the terms "an enzyme" have been replaced by the terms " $\beta$ -fructofuranosidase".

Claim 25 has been cancelled.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

1. The rejection of claims 1-8, 10-19 and 21-25 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendment to claim 1 cancelling the recitation "non-reducing sugar residue" and the Markush recitation and reciting the terms "fructosyl group". This amendment also overcomes the rejection of Claims 2-7 and 23 which depend from claim 1. Support for

Art Unit: 1623

the said recitation is seen in the specification. Claims 8, 12-22 and 25 have been cancelled. Claims 10 and 24 have been amended as above.

2. The instant claims as amended are now drawn to a beta-glucan derivative having three or more glucose residues and a fructosyl group chemically bonded to the reducing end of the beta glucan. Prior art Kobayashi et al (used in the rejection under 35 USC 102) discloses a derivative wherein the non-reducing sugar is a hexose having a terminal methoxy group at the C-1 position. The product of Kobayashi et al is different from the product instantly claimed and is novel.

3. Kobayashi does not teach the transfer of a fructosyl group and the use of beta-fructofuranosidase enzyme for the transfer in his process. Koki et al teach the preparation of fructosyl containing oligosaccharides using beta-fructofuranosidase. For the transglycosylation Koki teaches that the mono- or oligosaccharide is one other than glucose (page 5, lines 19-23). The teachings of Kobayashi and Koki do not render the instant process of adding a fructosyl group to the reducing end of a beta glucan containing at least three or more glucose units obvious.

4. Applicants have also shown via comparative examples that their products retain their whiteness and also maintain moldability without disintegrating.

Any comments considered necessary by the applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Art Unit: 1623

Any inquiry concerning this communication should be directed to Shaojia A. Jiang, Supervisory Patent Examiner in Art Unit 1623 at 571-272-0627.

/Leigh C. Maier/  
Primary Examiner  
Art Unit 1623